Message

From: Thaker, Ketan [kthaker@pa.gov]

Sent: 10/26/2021 8:25:23 PM

To: Hales, Dana [Hales.Dana@epa.gov]
CC: Patel, Pravin [prpatel@pa.gov]

Subject: RE: [External] PA0013463 US Steel Fairless Hills Facility

Attachments: PA0013463 NPDES Revided Draft Permit.pdf; PA0013463 Factsheet Addendum.pdf

Hi Dana,

Attached is copy of revised draft NPDES permit and Factsheet Addendum.

Thanks, Ketan

Ketan Thaker | Project Manager

Department of Environmental Protection | Southeast Regional Office

2 East Main Street | Norristown, PA 19401 Phone: 484.250.5193 | Fax: 484.250.5971

www.dep.pa.gov

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From: Hales, Dana <Hales.Dana@epa.gov>
Sent: Monday, October 18, 2021 12:52 PM
To: Thaker, Ketan <kthaker@pa.gov>
Cc: Patel, Pravin
Cp: Patel

Subject: RE: [External] PA0013463 US Steel Fairless Hills Facility

OK I got it. Thanks for clarifying Ketan.

Dana

Dana Hales

US Environmental Protection Agency

Clean Water Branch Permits Section (3WD41)

1650 Arch Street

Philadelphia, PA 19103 Phone: 215.814.2928 Email: hales.dana@epa.gov

From: Thaker, Ketan kent: Monday, October 18, 2021 11:44 AM To: Hales, Dana hales, Dana@epa.gov Cc: Patel, Pravin pratel@pa.gov

Subject: RE: [External] PA0013463 US Steel Fairless Hills Facility

Hi Dana,

I meant to say for the response #2.b is that we would calculate and include mass limits for chromium and nickel in the final NPDES permit. We included only concentration limits for these two parameters in the draft permit. Sorry for any confusion. We will send you the revised draft permit before we issue the final permit.

Thanks,

Ketan

Ketan Thaker | Project Manager

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Subject: RE: [External] PA0013463 US Steel Fairless Hills Facility

Hi Ketan,

Thanks for the responses. I have one follow-up question for clarification on response #2.b. Based on our phone discussion, I understood that Pravin committed to calculate the mass production-based TBELs for chromium and nickel, and compare those levels with the concentrations imposed in the previous permit — the more stringent of the two would be imposed in the permit. Is that still the intent? Or are you saying that the existing permit's concentrations and the mass production-based TBELs for chromium and nickel would both be imposed? Apologies, but I wasn't entire sure what your response was saying.

Once PADEP's has revised the fact sheet and permit, please submit those for EPA review prior to finalizing the permit. Thank you,

Dana

Dana Hales
US Environmental Protection Agency
Clean Water Branch
Permits Section (3WD41)
1650 Arch Street

Philadelphia, PA 19103 Phone: 215.814.2928

Email: hales.dana@epa.gov

From: Thaker, Ketan kent: Thursday, October 14, 2021 3:53 PM To: Hales, Dana hales, Dana@epa.gov Cc: Patel, Pravin pratel@pa.gov

Subject: RE: [External] PA0013463 US Steel Fairless Hills Facility

Hi Dana,

We have following response to the EPA comments on the draft NPDES permit PA0013463 for US Steel Fairless Hills Facility.

1. Regarding MP 103:

- a. We will calculate mass loadings for Total Chromium and Zinc using cooling tower blowdown flow of 2.01 MGD and revise the final NPDES permit and Factsheet accordingly.
- b. The Terminal Treatment Plant (MP 103) receives various waste streams from different sources. These includes (1) cooling tower blow down and water treatment blow down, housekeeping & stormwater from Fairless Energy (Dominion) with total flow of about 2.442 MGD, (2) Wastewater and filter back wash from water treatment plant, (3) Treated effluent flow of 0.856 MGD from Finishing Mill Treatment Plant from (MP 403). The total flow from MP 103 at the Terminal Treatment Plant is 3.75 MGD. Effluent limit for Total Residual Chlorine is calculated by using mass balance of 2.4 MGD flow from Fairless Energy while remaining 1.3 MGD of flow from various sources at 0.5 mg/l. The I-Max limit is kept at 0.5 mg/l, which is BAT. Calculating the TRC limit this way is more accurate and appropriate for treating various waste streams at Terminal Treatment Plant (MP 103).
- c. We will include other requirements for cooling tower blowdown for NSPS 423.15 (a) (10) (ii) as you suggested in the final NPDES permit.
- d. We will include other requirement in 423.15 (a)(2) that requires "There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid" in the final permit.

2. Regarding MP 403:

- a. The treated effluent from Finishing Mill Treatment Plant (MP 403) goes to Terminal Treatment Plant (MP 103) for further treatment. TSS and Oil & Grease are required to be applied at MP 103 as it receives cooling tower blowdown from Fairless Energy. Therefore, we have applied TBEL for TSS, Oil & Grease, pH at MP 103.
- b. We will calculate and include mass limits for Chromium and Nickel at MP 103. The effluent limits based on the technical development document are maintained in the permit as they were discussed with EPA and agreed upon during previous permit renewal.
- 3. 316 (b) Cooling Water Intake Structure
 - a. As suggested, we will include the language in Part C.VI.E regarding submission of intake screen velocity monitoring results as an attachment to monthly DMRs in the final NPDES permit.
 - b. We will add the language in Part C.VI.G. to include the requirement for the annual certification submission by January 28 of each year in the final NPDES permit.

Thank you, Ketan

Ketan Thaker | Project Manager

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From: Fulton, Jennifer < Fulton, Jennifer@epa.gov>

Sent: Thursday, October 7, 2021 2:30 PM **To:** Thaker, Ketan < kthaker@pa.gov>

Cc: Furjanic, Sean < sefurjanic@pa.gov>; Schumack, Maria < maschumack@pa.gov>; Patel, Pravin < prpatel@pa.gov>; Martinsen, Jessica < martinsen, jessica@epa.gov>; Hales, Dana < Hales, Dana@epa.gov>

Subject: [External] PA0013463 US Steel Fairless Hills Facility

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Ketan,

According to our Memorandum of Agreement, the Environmental Protection Agency (EPA) Region III has received the draft National Pollutant Discharge Elimination System (NPDES) permit for:

US Steel Fairless Hills Facility NPDES Number: PA0013463 EPA Received: September 9, 2021

30-day response due date: October 9, 2021

This is a major permit that discharges to Biles Creek and the Delaware River, and is affected by the Delaware River PCB TMDL. EPA has chosen to perform a limited review of the draft permit based on the wasteload allocation (WLA) requirements of the approved Delaware River PCB TMDL, Steam Electric Power Generating Point Source Category ELG (40 CFR Part 423), Iron and Steel Manufacturing Point Source Category (40 CFR Part 420), and Clean Water Act Cooling Water Intake 316(b) and 40 CFR Part 125 (Subpart J) requirements. EPA has completed its review and as discussed in a phone conversation with EPA on October 6, 2021, EPA offers the following comments:

1. Regarding MP 103:

- a. 40 CFR Part 423.15(a)(10)(i) includes requirements for cooling tower blowdown. The quantity of total chromium and total zinc discharged in this wastestream is to be determined using the flow of cooling tower blowdown and the listed concentrations. Page 5 of the fact sheet calculates mass loads for these pollutants based on the entire flow of 2.442 MGD as opposed to cooling tower blowdown flow of 2.01 MGD. The limitations for MP 103 will need to be recalculated and revised in the fact sheet and permit.
- b. 40 CFR Part 423.15(a)(10)(i) provides limitations for free available chlorine in cooling tower blowdown, but this parameter is not imposed in the permit. The permit provides limits for TRC, but the fact sheet does not an explanation as to why this parameter was utilized in the permit. 423.15(a)(8)(i) limits TRC for plants with a rated electric generating capacity of 25 or more megawatts; however, this is applicable to once through cooling water. It is unclear if once through cooling water discharges to MP103. The fact will need to clarify the applicable ELGs and pollutant parameters that are imposed in the permit.
- c. While Part C of the permit includes the "no-detectable amount" requirement for the 126 priority pollutants except chromium and zinc, it does not include the requirement at 40 CFR 423.15(a)(10)(ii). The permit should be revised to include this requirement.
- d. Part C of the permit will also need to include the NSPS at 40 CFR 423.15(a)(2) regarding no discharge of PCBs. As discussed, PADEP can provide a fact sheet discussion to document why PCB monitoring and PMP efforts related to the Delaware River PCB TMDL are appropriate. Additionally, PADEP will evaluate the need for influent PCB monitoring in an appropriate mechanism to evaluate influent vs. effluent PCB levels.

2. Regarding MP 403:

- a. It is unclear why some of the ELG standards for the wastestreams to MP 403 are being applied to MP 103, as opposed to MP 403. TSS, oil and grease, and pH are have standards for each applicable wastestream per 40 CFR 420.112(b), 420.102(a)(4), and 420.122(a)(1), and while these appear to have been adequately evaluated, the fact sheet doesn't explain why these TBELs were applied at MP 103.
- b. 40 CFR 420.102(a)(4) And 420.103(a)(4) both include production based limits for chromium and nickel, but mass-based limits were not evaluated and imposed at MP 403. It was discussed that PADEP would re-evaluate the TBELs for those pollutants and impose the appropriate limitations at MP 403. If

limitations based on the technical development document are to be maintained in the permit, then the fact sheet would need to provide the justification. A discussion for the rationale behind limitations on copper using the technical development document should also be included in the fact sheet.

- 3. PADEP's current template language for 316(b) requirements (attached) includes some additional language that does not appear in this draft permit. PADEP may want to consider adding the "missing" language for clarity in the permit, if appropriate:
 - a. Part C.VI.E of the permit already requires the permittee to monitor the velocity at the screen at a daily minimum frequency. PADEPs template also includes that intake screen monitoring velocity monitoring results are to be submitted on the Cooling Water Intake Monitoring Supplemental Report as an attachment to monthly DMRs.
 - b. Part C.VI.G. of the permit doesn't include the requirement for the annual certification submission by January 28 of each year.

Please address the above and provide us with any changes to the draft permit and/or fact sheet, if necessary. Please contact Dana Hales on my staff via telephone at 215-814-2928 or via electronic mail at hales.dana@epa.gov.

Thank you,

Jen Fulton

Jennifer Fulton, Acting Chief Clean Water Branch Water Division (3WD40) U.S. EPA Region 3 304-234-0248